

System, Method, and Computer Software Product for Gain Adjustment in Biological Microarray Scanner

Abstract of Disclosure

Systems, methods, and computer program products are described for adjusting the gain of a scanner. The scanner includes one or more excitation sources, an emission detector having a first gain, and a variable gain element having a second gain. One described method includes receiving a user-selected gain value, adjusting the first gain based on a first portion of the user-selected gain value, and adjusting the second gain based on a second portion of the user-selected gain value. Another described method includes selecting an auto-gain value, adjusting the first gain based on a first portion of the auto-gain value, adjusting the second gain based on a second portion of the auto-gain value, causing the scanner to collect sample pixel intensity values, determining a comparison measure based on comparing the sample pixel intensity values to desired pixel intensity values, and adjusting the auto-gain value based on the comparison measure.

Figures